



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/658,478

09/09/2003

Pierre Dobrovolny

7236

2041

7590 06/15/2007
Zenith Electronics Corporation
2000 Millbrook Drive
Lincolnshire, IL 60069

EXAMINER

TRAN, PABLO N

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

06/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/658,478

Applicant(s)

DOBROVOLNY

Examiner

Pablo N. Tran

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 7-14, 18 and 28-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 15-17, 19, 22, 23 and 35-37 is/are rejected.
- 7) ☒ Claim(s) 4, 20-21, 24-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-3, 5-6, and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2, 5 and 22 recites the limitation "wherein the mixer comprises: a filter...; and a mixer...." render the claim indefinite. According to figure 2, filter (40) and mixer (42) are two separate entities. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-6, 15, 19, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Horigome et al. (6,389,272).

As per claim 1, Horigome et al. disclosed a tuner comprising an RF input (fig. 1/antenna, fig. 6antenna), a signal level controller (fig. 1/no. 20, fig. 6/no. 20) coupled

to attenuate a signal from the RF input, a feedback amplifier (fig. 2/no. 21, fig. 6/no. 21) coupled to provide first and second outputs representing power of the attenuated signal, a mixer (fig. 2/no. 4, fig. 6/no. 4) coupled to mix at least one of the outputs of the amplifier with a local oscillator signal, and a feedback (fig. 2/no. 35, fig. 6/no. 36) coupled to control the attenuation provided by the signal level controller in response to the power of the attenuated signal.

As per claims 2-3, 5-6, and 22-23, Horigome et al. disclosed a filter (fig. 2/no. 3, fig. 6/no. 3) and a mixer (fig. 2/no. 4, fig. 6/no. 4).

As per claim 15, Horigome et al. disclosed an attenuator (fig. 1/no. 20, fig. 6/no. 20).

As per claim 19, as stated in claim 1, Horigome et al. disclose all claim limitations. Furthermore, Horigome et al. disclosed an attenuator (fig. 1/no. 20, fig. 6/no. 20, where it is clear that the attenuator is being utilized to prevent the mixer from overload).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16-17 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horigome et al. (6,389,272).

As per claims 16-17 and 36-37, Horigome et al. do not suggest a PIN attenuator or a gain controllable amplifier. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a PIN attenuator or a gain controllable amplifier in place of the attenuator, to the receiver of Horigome et al. in order to carry out gain adjustment of the frequency band with high accuracy.

Allowable Subject Matter

7. Claims 4, 20-21 and 24-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2618

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-directauspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

PABLO N. TRAN
PRIMARY EXAMINER

June 11, 2007


6/11/07